

All Databases

PubMed

Nucleotide

Protein

Genome

Structure

OMIM

PMC

Journals

Books

Search PubMed



for

Go

Clear

Limits

Preview/Index

History

Clipboard

Details

Display

Abstract



Show

20



Sort by



Send to



About Entrez

Text Version

Entrez PubMed

Overview

Help | FAQ

Tutorial

New/Noteworthy

E-Utilities

PubMed Services

Journals Database

MeSH Database

Single Citation Matcher

Batch Citation Matcher

Clinical Queries

Special Queries

LinkOut

My NCBI (Cubby)

Related Resources

Order Documents

NLM Catalog

NLM Gateway

TOXNET

Consumer Health

Clinical Alerts

ClinicalTrials.gov

PubMed Central

☐ 1: J Inherit Metab Dis. 2001 Apr;24(2):266-74.

Related Articles, Links



SpringerLink

FULL-TEXT ARTICLE

Enzyme therapy for pompe disease with recombinant human alpha-glucosidase from rabbit milk.

Van den Hout JM, Reuser AJ, de Klerk JB, Arts WF, Smeitink JA, Van der Ploeg AT.

Department of Pediatrics, Sophia Children's Hospital, University Hospital Rotterdam, The Netherlands. vanderploeg@alkg.azr.nl

Pompe disease is a metabolic myopathy caused by deficiency of lysosomal acid alpha-glucosidase. In this report we review the first 36 weeks of a clinical study on the safety and efficacy of enzyme therapy aimed at correcting the deficiency. Four patients with infantile Pompe disease were enrolled. They received recombinant human alpha-glucosidase from transgenic rabbit milk. The product is generally well tolerated and reaches the primary target tissues. Normalization of alpha-glucosidase activity in skeletal muscle was obtained and degradation of PAS-positive material was seen in tissue sections. The clinical condition of all patients improved. The effect on heart was most significant, with an impressive reduction of the left ventricular mass index (LVMI). Motor function improved. The positive preliminary results stimulate continuation and extension of efforts towards the realization of enzyme therapy for Pompe disease.

Publication Types:

- Clinical Trial

PMID: 11405345 [PubMed - indexed for MEDLINE]

Display

Abstract



Show

20



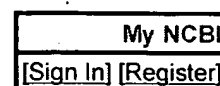
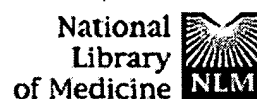
Sort by



Send to

[Write to the Help Desk](#)[NCBI](#) | [NLM](#) | [NIH](#)[Department of Health & Human Services](#)[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)

Jul 26 2005 04:43:15



All Databases

PubMed

Nucleotide

Protein

Genome

Structure

OMIM

PMC

Journals

Books

Search PubMed



for

Go

Clear

Limits

Preview/Index

History

Clipboard

Details

Display Abstract



Show

20



Sort by



Send to



About Entrez

Text Version

Entrez PubMed

Overview

Help | FAQ

Tutorial

New/Noteworthy

E-Utilities

PubMed Services

Journals Database

MeSH Database

Single Citation Matcher

Batch Citation Matcher

Clinical Queries

Special Queries

LinkOut

My NCBI (Cubby)

Related Resources

Order Documents

NLM Catalog

NLM Gateway

TOXNET

Consumer Health

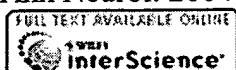
Clinical Alerts

ClinicalTrials.gov

PubMed Central

1: Ann Neurol. 2004 Apr;55(4):495-502.

Related Articles, Links



Enzyme replacement therapy in late-onset Pompe's disease: a three-year follow-up.

Winkel LP, Van den Hout JM, Kamphoven JH, Disseldorp JA, Remmerswaal M, Arts WF, Loonen MC, Vulto AG, Van Doorn PA, De Jong G, Hop W, Smit GP, Shapira SK, Boer MA, van Diggelen OP, Reuser AJ, Van der Ploeg AT.

Department of Pediatrics, Division of Metabolic Diseases and Genetics, Erasmus MC-Sophia, Rotterdam, The Netherlands.

Pompe's disease is an autosomal recessive myopathy. The characteristic lysosomal storage of glycogen is caused by acid alpha-glucosidase deficiency. Patients with late-onset Pompe's disease present with progressive muscle weakness also affecting pulmonary function. In search of a treatment, we investigated the feasibility of enzyme replacement therapy with recombinant human alpha-glucosidase from rabbit milk. Three patients (aged 11, 16, and 32 years) were enrolled in the study. They were all wheelchair-bound and two of them were ventilator dependent with a history of deteriorating pulmonary function. After 3 years of treatment with weekly infusions of alpha-glucosidase, the patients had stabilized pulmonary function and reported less fatigue. The youngest and least affected patient showed an impressive improvement of skeletal muscle strength and function. After 72 weeks of treatment, he could walk without support and finally abandoned his wheelchair. Our findings demonstrate that recombinant human alpha-glucosidase from rabbit milk has a therapeutic effect in late-onset Pompe's disease. There is good reason to continue the development of enzyme replacement therapy for Pompe's disease and to explore further the production of human therapeutic proteins in the milk of mammals.

PMID: 15048888 [PubMed - indexed for MEDLINE]

Display Abstract



Show

20



Sort by



Send to

[Write to the Help Desk](#)[NCBI](#) | [NLM](#) | [NIH](#)

Department of Health & Human Services

[Privacy Statement](#) | [Freedom of Information Act](#) | [Disclaimer](#)